

Profile Fixing Recommendations

These recommendations provide the minimum fastener sequence for each support position.

Main fasteners should be located a minimum of 30mm from the end of the sheet for all profiles.

Load capacity is dependent on span and the specification of the supporting substrate.

Project specific load checks should still be performed and additional fixings may be required.

Standard fixings are minimum 5.5mm self drilling self-tapping fasteners with washers if required.

Both pull out and pull over figures should be checked, especially for decks to large spans.

Roofing

Trisobuild Profile	End of Sheet Fixings	Intermediate Fixings	Maximum Side Lap Fixing Centres
13½ / 3	Every third crown	Every third crown	450mm centres
R40	Two per trough	Every trough	450mm centres
All other profiles	Every trough	Every other trough*	450mm centres

Walls

Trisobuild Profile	End of Sheet Fixings	Intermediate Fixings	Maximum Side Lap Fixing Centres
13½ / 3	Every third trough	Every third trough	500mm vertical, 600mm horizontal
WP40 and WP40H	Every trough	Every trough	500mm vertical, 600mm horizontal
All other profiles	Every trough	Every other trough*	500mm vertical, 600mm horizontal

The C32MR and WP40H profiles in minimum 0.7mm thick steel are recommended for horizontal use.

Use of single skin cladding in the horizontal plane is far more susceptible to apparent changes in colour, gloss and reflectivity.

In this instance Tata Steel recommend the allowable variation in the outer flange level of the cladding rail with respect to a vertical datum line is L/600 (where L is the rail spacing) and would also encourage regular vertical features to be designed into the façade to avoid continuous runs.

Structural Decks and Liner Trays

RoofDek Profile	End of Sheet Fixings	Intermediate Fixings	Maximum Side Lap Fixing Centres
D32s, D35	Every trough	Every other trough*	Not essential**
D46, D60, D100	Every trough	Every trough	500mm centres
D137, D159, D200	Every trough	Every trough	500mm centres
D210†	Every trough	Every trough	350mm centres
All HLT trays	Three per pan***	Three per pan***	500mm centres

The number of RoofDek fixings is dependant on loads, spans, substrates and diaphragm requirements.

Tata offer a free calculation service to BS EN 1993-1 to confirm the fixing requirement

†The D210 profile requires alignment cleats to prevent profile spread.

Notes

* Every other trough is based on always fixing the first trough of every sheet. Additional fixings may be required.

** Sidelap fixings may be required for diaphragm action or to support a mechanically fixed single ply membrane system.

*** One of the HLT Tray fixings is placed in a central trough position to prevent wind chatter. The other two fixings must be placed within 75mm of the upstand on each side, as must extra fixings if required to resist wind suction.

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